

Australia installs record-breaking number of rooftop solar panels

May 13 2021



Credit: Pixabay/CC0 Public Domain

Data from the Clean Energy Regulator analyzed by CSIRO shows that in 2020, around Australia, over 362,000 rooftop solar PV installations were issued with small-scale renewable energy scheme certificates (STCs) under the Small-scale Renewable Energy Scheme.

This is an increase of 28 percent from 2019, when 283,991 installations were issued STCs, with the majority of installs under the scheme being

residential, and a smaller number for commercial and industrial properties.

CSIRO Chief Executive Dr. Larry Marshall said the analysis showed a strong appetite for science-led innovation in Australia.

"CSIRO has analyzed and projected energy futures for more than two decades, and over that time we have accurately forecast and tracked the reduction in cost of renewables, and the development of battery storage options, including our own UltraBattery," Dr. Marshall said.

"Science has made renewables cost competitive with conventional power, letting market forces take over to drive a global transition to lower emissions.

"Australia's solar advantage creates an economic opportunity for us on the world stage and an environmental benefit for the globe—even better when it's powered by Australian science and research."

CSIRO researchers use the Clean Energy Regulator data as the best indicator of PV installations around Australia, and is just one of the five sources of data collated by CSIRO's [Australian Housing Data Portal](#).

Senior Experimental Scientist Michael Ambrose is part of a team that uses a vast array of data to track the progress in residential sustainability efforts.

"The solar PV installation data shows how quickly PV systems have been taken up across Australia and the increasing size of the PV arrays," Mr Ambrose said.

The states with the highest number of solar PV systems installed in 2020 were: New South Wales (with 108,922), Queensland (86,912), Victoria

(71,798), Western Australia (47,653) and South Australia (35,599).

Individual postcodes leading the charge in 2020 were:

- 3064 (Victorian suburbs of Craigieburn, Donnybrook, Mickleham and Roxburgh Park) with 2484 systems
- 3029 (Victorian suburbs of Hoppers Crossing, Tarneit, Truganina) with 2435
- 3977 (Victorian suburbs of Cranbourne, Sandhurst and Skye) with 2036
- 2765 (NSW suburb of Marsden Park, Berkshire Park, Vineyard, Box Hill) with 1841
- 6112 (WA suburb of Armadale, Forrestdale, Bedfordale with 1778

Australia has the highest uptake of solar globally. Clean Energy Regulator data shows that more than 2.68 million rooftop solar power systems have been installed in Australia in total, as of 31 December 2020; that means one in four homes have solar panels on their roof.

"Australia is one of the sunniest places on the planet. We lead the world in PV capacity on a per capita basis at 591 watts per person which is almost eight times the worldwide average," Mr Ambrose said.

Launched in 2019, the Australian Housing Data Portal centralizes a vast amount of [energy](#) efficiency data that underpins key decision making, training and awareness.

Updated monthly, the portal contains data across states and climate zones and can be further broken down by design (e.g. dwelling class and floor area), construction (e.g. type of walls and roofing) and fixtures and appliances (e.g. solar PV and heating/cooling systems).

Clean Energy Regulator's Executive General Manager Mark Williamson said that 3 gigawatts (GW) of rooftop solar PV capacity was installed nationally in 2020, a 40 percent increase on the 2.2 GW installed in 2019, and this is trending higher in 2021 with an expected 3.5 to 4 GW of capacity. The growth in capacity has been driven by increasing system size, with the average system now between 8 and 8.5 kilowatts.

"Sustained low technology costs, increased work from home arrangements and a shift in household spending to home improvements during COVID-19 played a key role in the increase of rooftop solar PV systems under the SRES," Mr Williamson said.

Provided by CSIRO

Citation: Australia installs record-breaking number of rooftop solar panels (2021, May 13)
retrieved 20 April 2024 from

<https://techxplore.com/news/2021-05-australia-record-breaking-rooftop-solar-panels.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.